

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A cutting tool insert comprising a substrate and a coating wherein the coating comprises one or more layers of refractory compounds of which at least one layer comprises a precipitation hardened  $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  based layer, where Me is one of the ~~element~~ elements Zr, Hf, V, Nb, Ta, Cr, Mo, W or Si, and wherein:

x is between ~~0.50~~ 0.55 and 0.80;

a ratio,  $R=x/(x+y)$ , is between 0.50 and 0.85;

a sum of Ti and Al subscripts,  $S=x+y$ , is between 0.7 and less than 1.0;

a ratio of the peak width,  $F_{10/90}$ ,  $\text{FW}_{10\%M}$  or  $\text{FW}_{90\%M}$  meaning Full Width at 10% and 90% of the maximum peak value reduced with the background, measured using X-ray diffraction with Cu K $\alpha$  radiation of the 200 peak at approximately  $43^\circ 2\theta$  of the  $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  coating is higher than 7.5;

a ratio between the area of the h-AlN (100) peak at approximately  $33^\circ 2\theta$  ( $=A(\text{h-AlN})_{100}$ ) and the c- $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  (200) peak at approximately  $43^\circ 2\theta$  ( $=A(\text{c}-(\text{Ti,Al,Me})\text{N})_{200}$ ) called K, wherein  $K=A(\text{h-AlN})_{100}/A(\text{c}-(\text{Ti,Al,Me})\text{N})_{200}$ , and K is between 0 and 0.3; and

the layer has a single  $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  (200) peak.

2. (Currently Amended) The cutting tool insert according to claim 1 wherein:

x is between 0.55 and 0.70;

the ratio,  $R=x/(x+y)$ , is between 0.55 and 0.75;

the sum of Ti and Al subscripts,  $S=x+y$ , is between 0.8 and less than 1.0; and

the  $F_{10/90}$  value is higher than 8.

3. (Original) The cutting tool insert according to claim 2, wherein:

x is between 0.60 and 0.70;

the ratio,  $R=x/(x+y)$ , is between 0.60 and 0.75;

the  $F_{10/90}$  value is higher than 9; and

K is between 0 and 0.2.

4. (Canceled) ~~The cutting tool insert according to claim 1, wherein  $x+y=1$ .~~

5. (Canceled) ~~The cutting tool insert according to claim 1, wherein  $x+y<1$ .~~

6. (Currently Amended) The cutting tool insert according to claim ~~[[5]]~~ 1, wherein Me=V, Zr, Ta, Nb, Si, or Cr.

7. (Currently Amended) ~~A~~ The cutting tool insert according to claim 6, wherein ~~Me=Zr, or Nb~~ comprising a substrate and a coating wherein the coating comprises one or more layers of refractory compounds of which at least one layer comprises a precipitation hardened  $(Ti_yAl_xMe_{1-x-y})N$  based layer, where Me is one of the elements Zr or Nb, and wherein:

x is between 0.55 and 0.80;

a ratio,  $R=x/(x+y)$ , is between 0.50 and 0.85;

a sum of Ti and Al subscripts,  $S=x+y$ , is between 0.7 and less than 1.0;

a ratio of the peak width,  $F_{10/90}$ , FW10%M or FW90%M meaning Full Width at 10% and 90% of the maximum peak value reduced with the background, measured using X-ray diffraction with Cu  $K\alpha$  radiation of the 200 peak at approximately  $43^\circ 2\theta$  of the  $(Ti_yAl_xMe_{1-x-y})N$  coating is higher than 7.5;

a ratio between the area of the h-AlN (100) peak at approximately  $33^\circ 2\theta$  ( $=A(h-AlN)_{100}$ ) and the c- $(Ti_yAl_xMe_{1-x-y})N$  (200) peak at approximately  $43^\circ 2\theta$  ( $=A(c-(Ti,Al,Me)N)_{200}$ ) called K, wherein  $K=A(h-AlN)_{100}/A(c-(Ti,Al,Me)N)_{200}$ , and K is between 0 and 0.3; and

the layer has a single  $(Ti_yAl_xMe_{1-x-y})N$  (200) peak.

8. (Original) The cutting tool insert according to claim 1, wherein the layer is deposited by PVD and the precipitates are obtained by a spinodal decomposition of the cubic  $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  layer.

9. (Original) The cutting tool insert according to claim 1, wherein the precipitates comprise nano-meter sized cubic TiN (c-TiN) and cubic AlN (c-AlN) and/or hexagonal AlN (h-AlN).

10. (New) The cutting tool insert according to claim 7, wherein:

x is between 0.55 and 0.70;

the ratio,  $R=x/(x+y)$ , is between 0.55 and 0.75;

the sum of Ti and Al subscripts,  $S=x+y$ , is between 0.8 and less than 1.0; and

the  $F_{10/90}$  value is higher than 8.

11. (New) The cutting tool insert according to claim 10, wherein:

x is between 0.60 and 0.70;

the ratio,  $R=x/(x+y)$ , is between 0.60 and 0.75;

the  $F_{10/90}$  value is higher than 9; and

K is between 0 and 0.2.

12. (New) The cutting tool insert according to claim 7, wherein the layer is deposited by PVD and the precipitates are obtained by a spinodal decomposition of the cubic  $(\text{Ti}_y\text{Al}_x\text{Me}_{1-x-y})\text{N}$  layer.

13. (New) The cutting tool insert according to claim 7, wherein the precipitates comprise nano-meter sized cubic TiN (c-TiN) and cubic AlN (c-AlN) and/or hexagonal AlN (h-AlN).